

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/014781

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> C07C257/02, C07D257/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> C07C257/02, C07D257/04-257/06

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
CAPLUS (STN), CASREACT (STN)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 5-286972 A (Zenaca Ltd.), 02 November, 1993 (02.11.93), Claims; Par. Nos. [0027] to [0029]	1-8
Y	JP 46-10526 B1 (Toyo Jozo Co., Ltd.), 17 March, 1971 (17.03.71), Column 4, line 37 to column 5, line 6	1-3
Y	JP 9-309883 A (Kabushiki Kaisha Toyo Kasei), 02 December, 1997 (02.12.97), Claims; Par. Nos. [0003] to [0010]	4-8
A	JP 2001-172248 A (Nippon Fine Chemical Co., Ltd.), 26 June, 2001 (26.06.01), Claims	1-3

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
14 December, 2004 (14.12.04)Date of mailing of the international search report  
28 December, 2004 (28.12.04)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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PCT/JP2004/014781

**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 40-13726 B1 (Toyo Jozo Co., Ltd.), 01 July 1965 (01.07.65), Claims	1-3
A	JP 2002-284770 A (Council of Scientific and Industrial Research), 03 October, 2002 (03.10.02), Claims	4-8
A	JP 63-112570 A (Dynamit Nobel AG.), 17 May, 1988 (17.05.88), Claims	4-8

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**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

The matter common to a group of inventions of claims 1-3 and a group of inventions of claims 4-8 is compounds represented by the general formula (2), but the compounds are not novel as disclosed in JP 2003-321431 A (Fuji Photo Film Co., Ltd.) 11 November, 2003 (11.11.03). Incidentally, the inventions of claims 1-3 are not disclosed in the earliest application which is referred in claiming priority (filing date: 10.10.2003), so that as described above, the compounds represented by the general formula (2) are not novel.

Thus, the matter common to the two groups of inventions is not a special technical feature, and the two groups of inventions are not so linked as to form a single general inventive concept.

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/JP2004/014781**

JP 5-286972 A	1993.11.02	EP 554098 A2 AU 9331007 A NO 9300276 A FI 9300022 A CA 2086647 A ZA 9300014 A US 5334718 A NZ 245694 A DE 69320668 E
JP 46-10526 B1	1971.03.17	(Family: none)
JP 9-309883 A	1997.12.02	EP 796852 A1 US 5744612 A JP 10-114772 A US 6040454 A DE 69707537 E
JP 2001-172248 A	2001.06.26	(Family: none)
JP 40-13726 B1	1965.07.01	(Family: none)
JP 2002-284770 A	2002.10.03	US 6326498 B1
JP 63-112570 A	1988.05.17	DE 3634717 A EP 264008 A US 4791210 A DE 3788921 G